

CLAIMS

What is claimed is:

1. A method of fabricating PTFE material comprising:
 - preparing a mixture of PTFE resin powder and a susceptor material;
 - feeding the mixture into a compaction zone to at least partially compact and shape the mixture; and
 - providing a continuous flow of the mixture from the compaction zone to a heating zone and heating and sintering the mixture within the heating zone by exciting the susceptor material by application of wave energy.
2. The method of claim 1 including drawing a vacuum on the mixture within the heating zone to extract air from the mixture.
3. The method of claim 2 wherein the heating zone has an initial stage for preheating and finishing compaction of the mixture prior to sintering the mixture.
4. The method of claim 2 including passing the sintered mixture through a cooling zone following the heating zone.
5. The method of claim 1 including cutting the PTFE material while the mixture is at a temperature below a sintering temperature within the heating zone but above ambient temperature.
6. The method of claim 1 wherein the mixture is compacted into a generally tubular form.
7. The method of claim 1 wherein the mixture is heated by microwave energy.
8. A method of fabricating a PTFE material, comprising:
 - preparing a mixture of PTFE resin powder and a susceptor material;
 - compacting the mixture; and
 - sintering the mixture by exciting the susceptor material with microwave energy.

9. The method of claim 8 including drawing a vacuum on the mixture during the sintering step to extract air from the mixture.